

BILL NO. S-70-02-06

SPECIAL ORDINANCE NO. S- 426-70

AN ORDINANCE approving an Agreement with CAMPBELL, DEBOE, GIESE AND WEBER for engineering services in connection with Boiler Unit at Lawton Park Station.

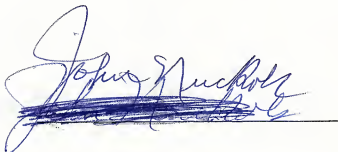
BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. A certain Agreement approved January 28, 1970 between the City of Fort Wayne, by and through its Mayor and the Board of Public Works, and CAMPBELL, DEBOE, GIESE and WEBER, for engineering services in connection with planning, design and installation of Boiler Unit at Lawton Park Station in connection with the City Light Power and Improvement Project, all as more particularly set forth in said Agreement which is on file in the office of the Board of Public Works, and is by reference incorporated herein and made a part hereof, is hereby in all things ratified, confirmed and approved.

SECTION 2. This Ordinance shall be in full force and effect from and after its passage and approval by the Mayor.

APPROVED AS TO FORM
AND LEGALITY.


CITY ATTORNEY


MAYOR

Read the first time in full and on motion by Nuckols seconded by Steigerwald and duly adopted, read the second time by title and referred to the (Committee on) Public Utilities ~~Public Works~~ (and to the City Plan Commission for recommendation) (and Public Hearing to be held after due legal notice, at the Council Chambers, City Hall, Fort Wayne, Indiana, on the _____ day of _____, 1967, at _____ o'clock P.M., E.S.T.

Date: 2-10-70

Frank H. Bonahoom
City Clerk

Read the third time in full and on motion by Geake seconded by Steigerwald and duly adopted, placed on its passage. Passed (~~lost~~) by the following vote:

AYES	<u>9</u>	NAYS	<u>0</u>	ABSTAINED	_____	ABSENT	_____	to-wit:
Adams	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Dunifon	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Fay	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Geake	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Nuckols	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Robinson	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Rousseau	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Steigerwald	<u>✓</u>	_____	_____	_____	_____	_____	_____	
Tipton	<u>✓</u>	_____	_____	_____	_____	_____	_____	

Date 2-24-70

Frank H. Bonahoom
City Clerk

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as (Zoning Map)(General)(Annexation)(Special)(~~Appropriation~~) Ordinance (Resolution) No. 5-426-70

on the 24th day of February, 1967.

ATTEST:

(SEAL)

Frank H. Bonahoom
City Clerk

Herbert L. Tipton
Presiding Officer

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 11th day of March, 1967 at the hour of 8:30 o'clock A.M.,E.S.T.

Frank H. Bonahoom
City Clerk

Approved and signed by me this 11th day of March, 1967, at the hour of 9:15 o'clock A.M.,E.S.T.

Harold L. Zito
Mayor

Bill No. S-70-02-06

REPORT OF THE COMMITTEE ON CITY UTILITIES

We, your Committee on City Utilities to whom was referred an Ordinance
approving an Agreement with CAMPBELL, DEBOE, GIESE AND WEBER for engineering
services in connection with Boiler Unit at Lawton Park Station,

have had said Ordinance under consideration and beg leave to report back to the Common
Council that said Ordinance no PASS.

William K. Geake, Chairman

Jack K. Dunifon, Vice-Chairman

Celia Ann Fay

John Nuckols

John H. Robinson

William K. Geake
Jack K. Dunifon
John Nuckols

CONCURRED IN

DATE 2-24-70 FUAD G. BONAHOOM, CITY CLERK

CAMPBELL, DEBOE, GIESE & WEBER
ENGINEERS

PARTNERS
CARL E. CAMPBELL
HOWARD M. DEBOE
ROBERT W. GIESE
HOWARD K. WEBER

2138 MADISON AVENUE TOLEDO, OHIO 43624
419 -- 243-6194

ASSOCIATES
GEORGE F. RUD
RICHARD L. WOLKINS
ALVIN D. CURTIS
LLOYD J. HILL, JR.

March 9, 1970

Mr. Howard C. Coblentz
General Superintendent
City Utilities
308 E. Berry Street
Fort Wayne, Indiana



Subject: Electrical Power Costs

Dear Sir:

In response to your letter of February 25, 1970, we offer the following comments which may be of some assistance to you:

1. In order to conserve the existing equipment and in interest of air pollution control, a high load factor is presently carried on purchased power, which results in lower purchased unit cost and higher generation unit costs.

The proposed new unit would enable a favorable (high) load factor on generation, with resultant lower generation costs, and lower total power costs.

2. Assuming continuation of some generation it will cost less to generate than to purchase. The incremental cost of generation (the added increment of cost for an increment of additional load) consists of fuel cost only.

Incremental unit cost of generation on the existing (coal fired) equipment is approximately 5.85 mills per kwh on present equipment. Incremental unit cost of generation on the proposed gas fired boiler with existing steam turbines will be 5.4 mills per kwh.

Unit fuel cost for generation on the new gas turbine unit will be equal to or slightly less than on the steam plant, when operated

at full load, that is, 4.98 mills per kwh. Since minimal attendance is required, total cost will be less than for purchase.

Comparable cost for purchased power, in 1969, was 7.8 mills per kwh, at a favorable load factor, and before the latest fuel adder increase.

3. If the present plant were to be shutdown and generation discontinued, there is some question of the availability of purchased power in this quantity. Additional facilities would undoubtedly be required by both the power company and Fort Wayne.

The new boiler could be in service sooner than could substation facilities.

4. It is estimated that with continued generation, using the proposed new gas fired equipment, power can be generated at costs which results in a modest saving compared to purchased costs for the equivalent amount of power. Shutdown of the generating facilities would result in additional purchase of approximately 170,000 megawatt hours per year at a cost of \$1,360,000.00, plus the fixed charges on additional substation and interconnection facilities.
5. The generating costs are somewhat predictable. Future purchase costs may not be so. Electrical rates for power from the major utilities are expected to increase in the near future.

Attached is the cost and heat rate data forming the basis for the foregoing comments.

Very truly yours,


H. M. DeBoe

mif
attach.

CITY OF FORT WAYNE, INDIANA

COST DATA

Generation Costs:

Cost Factors:

Heat rate, present
steam plant 15,000 BTU/kwh

Heat rate, new gas
turbine at full load 13,840 BTU/kwh

Fuel cost rates -

gas	\$.36 per million BTU
oil	\$.72 per million BTU
coal	\$.39 per million BTU

Unit fuel cost - \$/kwh:

gas	$.36 \times 15,000 \times 10^{-6} = \$.0054/\text{kwh}$
oil	$.72 \times 15,000 \times 10^{-6} = \$.00585/\text{kwh}$ S
coal	$.39 \times 15,000 \times 10^{-6} = \$.0108/\text{kwh}$ U
Gas Turbine - gas	$.36 \times 13,840 \times 10^{-6} = \$.00498/\text{kwh}$
- oil	$.72 \times 13,840 \times 10^{-6} = \$.00986/\text{kwh}$

Purchase Costs:

Contract Rates:

\$2,275 per Kva (includes 250 hrs use of demand)

\$.00485 per kwh for excess kwh.

\$.00035 per kwh fuel adder.

Unit purchase cost:

1969 - actual 7.8 mills/kwh average.

1970 - would be approximately 8.0 mills because of fuel adders.

I & M Billing Purchased Power

	<u>Billing KWH</u>	<u>Demand</u>	<u>Hours Use</u>	<u>Cost/KWH</u>
Feb. 1970			439 Hrs	.007853
Jan. 1970	25,644,794 KWH	53,040 KVA	483 Hrs.	.007552
Dec. 1969	26,408,159	50,040	528	.007370
Nov.	19,979,827	46,560	429	.007889
Oct.	21,563,881	43,920	491	.007557
Sept.	22,211,251	48,480	458	.007705
Aug.	21,966,520	52,320	420	.007870
July	24,958,886	57,960	430	.00777
June	21,308,458	52,440	406	.007963
May	18,513,530	48,720	380	.008187
April	18,194,688	43,200	421	.007961
March	20,694,593	43,200	502	.007278
Feb.	20,041,441	45,480	462	.007470
Jan.	22,962,676	48,000	478	.007599
As of Feb 1.		Fuel Cost		.00035
Beginning Sept. 1969		Fuel Cost		.0003
April 1968 to Sept. 1969		Fuel Cost		.00025

